

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Julin Wan et al.

Group Art Unit:

Serial No.:

Examiner:

Filed:

For NANOSCALE ORDERED COMPOSITES OF
COVALENT CERAMICS FOR
HIGH-TEMPERATURE STRUCTURAL
APPLICATIONS VIA
BLOCK-COPOLYMER-ASSISTED ASSEMBLY
AND METHOD OF MAKING

"EXPRESS MAIL" MAILING
LABEL NUMBER
EV 300767759

INFORMATION DISCLOSURE STATEMENT

- ☒ 1 **Pursuant to 37CFR 1.97(b)**
[within 3 months of national, non-CPA filing or prior to 1st Office Action] *no charge*
- ☐ 2 **Certification Pursuant to 37 CFR 1.97(c)(1)**
[before Final Office Action, Allowance, or other action closing prosecution] *no charge*
- ☐ 3 **Fee Payment Pursuant to 37 CFR 1.97(c)(2)**
[before Final Office Action, Allowance, or other action closing prosecution] *\$180.00*
- ☐ 4 **Certification & Fee Payment Pursuant to 37 CFR 1.97(d)**
[On or before issue fee payment] *\$180.00*

ATTN: BOX PATENT APPLICATION
Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

The following are submitted in the above application in compliance with 37 CFR 1.97 and 37 CFR 1.98:

- ☒ 5 A list of documents on form PTO-1449 or Substitute together with copies of each identified document and a translation thereof or a concise explanation of each non-English language document or a Search Report from an International Searching Authority for a patent application filed via the Patent Cooperation Treaty or document(s) cited in the application or the priority application.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Assistant Commissioner for Patents, Washington, D.C. 20231, on the date indicated below.

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| Date of Deposit |
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| Type or Print Name |
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| Signature |

This paper is submitted in accordance with:

- ☒ 6 37 CFR 1.97(b): [within 3 months of national, non-CPA filing or prior to 1st Office Action]
- ☐ 7 37 CFR 1.97(c): [before Final Office Action, Allowance, or other action closing prosecution, whichever is earlier]; and
- ☐ 8 The required Certification made in item 11 below;
- ☐ 9 ^{or} The \$180.00 fee specified in 37 CFR 1.17(p) for submission of this Information Disclosure Statement is authorized in item 15 below.
- ☐ 10 37 CFR 1.97(d): [on or before issue fee payment]; and
- a) The required Certification is stated in item 11 below; and
- b) The \$180.00 fee specified in 37 CFR 1.17(p) for submission of this Information Disclosure Statement is authorized in item 14 below.
- ☐ 11 Certification
- ☐ 12 Each item of information contained in this Statement was first cited in any communication from a foreign patent office in a counterpart foreign patent application not more than three months prior to the filing of this Statement; or
- ☐ 13 No item contained in this Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing this document after making reasonable inquiry, no item of information contained in this Statement was known to any individual designated in 37 CFR 1.56(c) more than three (3) months prior to the filing date of this Statement.
- ☒ 14 Payment of all applicable fees:
- ☒ 15 Please charge all applicable fees associated with the submittal of this Information Disclosure Statement to Deposit Account No. 07-0868

An original and two (2) copies of this document are enclosed.

January 15, 2004

Date

General Electric Company
CRD Patent Docket Rm 4A59
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Respectfully submitted,



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|---|-----------------|--|----------|-------------------------------|-----------------|----------------|----------------------------------|
| FORM PTO-1449 (REV. 7-80) | | U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE | | ATTY. DOCKET NO. 145523-1 | | SERIAL NO. | |
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT <u>LIST OF ITEMS</u> | | | | Applicant Julin Wan et al. | | | |
| | | | | Filing Date | | Group Art Unit | |
| U.S. PATENT DOCUMENTS | | | | | | | |
| *EXAMINER INITIAL | DOCUMENT NUMBER | | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
| | A1 | 6,270,846 | 8/7/01 | Brinker et al. | | | |
| | A2 | 6,478,994 | 11/12/02 | Sneddon et al. | | | |
| | A3 | 6,541,539 | 4/1/03 | Yang et al. | | | |
| | A4 | 6,592,991 | 7/15/03 | Wiesner et al. | | | |
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| | | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | TRANSLATION YES NO |
| | B1 | | | | | | |
| OTHER INFORMATION (Including Author, Title, Date, Pertinent Pages, etc.) | | | | | | | |
| | C1 | Christopher Viney, "Processing and Microstructural Control: Lessons From Natural Materials", Materials Science and Engineering, Volume 10, pp.187-236, 1993. | | | | | |
| | C2 | Michael Rubner, "Synthetic Sea Shell", Nature Publishing Group, Volume 423, pp. 925-926, June 26, 2003. | | | | | |
| | C3 | A. Monnier et al., "Cooperative Formation of Inorganic-Organic Interfaces in the Synthesis of Silicate Mesostructures", Science, Volume 261, pp. 1299-1303, September 3, 1993. | | | | | |
| | C4 | Markus Templin et al., "Organically Modified Aluminosilicate Mesostructures From Block Copolymer Phases", Science, Volume 278, pp. 1795-1798, December 5, 1997. | | | | | |
| | C5 | Shu Yang et al., "Ordered Hydrophobic Organosilicates Templated By Block Copolymers", Chem. Mater., Volume 14, pp. 5173-5178, 2002. | | | | | |
| | C6 | Kersten M. Forsthoefel et al., Chemical Precursor routes to Nanostructured Non-Oxide Ceramics", Mat. Res. Soc. Symp. Proc., Volume 728, page 53 and pp. 60-64, 2002. | | | | | |
| | C7 | Li-Anne Liew et al., "Fabrication of SiCN Ceramic MEMS Using Injectable Polymer-Precursor Technique", Elsevier, Sensors and Actuators A, Volume 89, pp. 64-70, 2001. | | | | | |
| | C8 | Tomasz Kowalewski et al., "Nanostructured Carbon Arrays From Block Copolymers of Polyacrylonitrile", J. Am. Chem. Soc. Volume 124, No. 36, pp. 10632-10633 | | | | | |
| | C9 | Zhiyong Tang et al., "Nanostructured Artificial Nacre", Nature Materials, Volume 2, pp. 413-418, June 2003. | | | | | |
| EXAMINER | | | | | DATE CONSIDERED | | |
| EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant | | | | | | | |